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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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SEP - 7 2006

Ref: 8EPR-SR

ACTION MEMORANDUM AMENDMENT

SUBJECT: Action Memorandum Amendment for the Non-Time Critical Removal Action at the Empire Canyon Site, Park City, Utah.

FROM: Kathryn Hernandez
Remedial Project manager

TO: Max Dodson
Assistant Regional Administrator

Site ID#: 0894
Category of Removal: Non-Time Critical Removal

I. INTRODUCTION

The purpose of this Action Memorandum Amendment is to document and request approval of a modification to the PRP Lead Non-Time Critical Removal Action (NTCRA) at the Empire Canyon Site (the Site) in Park City, Utah. The modification includes an amendment to the preferred cleanup alternative that was selected for the Removal Action at one portion of the Site known as the Daly West Mine Dump. This would require a land use change from recreational to residential and commercial.

The Site is located within the Upper Silver Creek Watershed, where stakeholder-based investigation and cleanup efforts are occurring. The NTCRA is one of several actions designed to address contamination issues in the watershed. In December 2003, EPA and United Park City Mines (UPCM) entered into an Administrative Order on Consent for Non-Time Critical Removal Action, Docket No. CERCLA-08-2004-0003 (AOC) for performance of the NTCRA. The removal action to be implemented according to the AOC included addressing contaminated sediments and surface water that exist in the Empire Canyon and nearby drainages. It also included placement of adequate cover and containment of the historical Daly West Mine Dump, with implementation of engineering controls to manage erosion, maintain the cover, and protect surface water. This work was projected to be complete in 2006. The amendment to the NTCRA addresses development activities specific to the Daly West Mine Dump.

The Daly West Mine Dump (Mine Dump) is located adjacent to the Empire Canyon Day Lodge, owned by the Deer Valley ski resort. The Mine Dump is surrounded by ski runs and is

easily accessed by year round recreational users. UPCM recently agreed to lease a portion of the Empire Canyon site to DV Luxury Resort, LLC (DVLRL). DVLRL has proposed the construction of a hotel, spa and condominium project at the Mine Dump. The footprint of the proposed hotel building covers the majority of the Mine Dump, while landscaping, pedestrian walkways, and parking areas cover the remaining acreage of the Mine Dump.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description and History

The Site is an historic ore mining and processing area located in and around Park City, Summit County, Utah. The Site is situated on the eastern slope of the Wasatch Range, approximately 25 miles east of Salt Lake City. The town of Park City rests at the downstream end of Empire Canyon.

The immediate area around the Site consists of steep canyon walls with mine/mill wastes and mine overburden present in several locations, which slope directly into the Empire Canyon drainage. The terraces or flat spots in the canyon are the locations of former mining facilities and a municipal drinking water tank. There were several mines, a concentrator, assay office, trams and other mine workings in the canyon up to the drainage divide.

Waste rock piles from the mine operations are located along the canyon walls as well as in the Empire channel. Several worn trails parallel the channel and traverse the mill and mine sites. The canyon is a popular area for residents and visitors to hike and mountain bike. The Empire Canyon drainage originates approximately one mile to the south near the Summit/Wasatch County line. Flow originating in the canyon occurs in a small channel. This water forms the headwaters of Silver Creek, which is a tributary of the Weber River.

Empire Canyon is situated between, and within, the Deer Valley and Park City Ski Resorts. The Daly West Mine Dump is located within Empire Canyon and adjacent to the Empire Canyon Day Lodge, which is frequented by skiers from the resorts. The Deer Valley Ski Resort and Daly West Mine Dump receive 350 inches of snow annually. The Mine Dump is covered by snow from November to early May in a typical year. The Mine Dump has changed significantly since the removal action began in 2003. Activities have included excavation and removal of contaminated soils and mine rock, and recontouring of the remaining material.

1. Stakeholder investigative activities at the Site

a. Removal Site Evaluation

The Site was initially investigated in 1996. The Utah Department of Environmental Quality (UDEQ) conducted a Preliminary Assessment (PA) of the Site which noted that mine waste and elevated levels of heavy metals were present at the Site and that additional investigation was warranted.

b. Clean Water Act 303(d) Listing of Silver Creek

In 1999, EPA and other stakeholders, under the name of the Upper Silver Creek Watershed Stakeholders Group (USCWSG), began a collaborative watershed investigation in the Park City area. At that time, six sites in the area were already listed on CERCLIS, including the Site, and a holistic, watershed approach was deemed necessary. One significant environmental impact was the listing of Silver Creek on the Clean Water Act Section 303(d) list of impaired water bodies due to elevated levels of zinc and cadmium. As part of this effort, the Stakeholders Group conducted water and sediment sampling in Silver Creek to pinpoint significant sources of loading. This work showed that Empire Canyon was a significant source of metals to Silver Creek and that more detailed investigation was required in the area. It was also known that there was significant recreational use of the Empire Canyon area.

c. Expanded Site Inspection (ESI)

UDEQ conducted an Expanded Site Inspection (ESI). The ESI investigated the Empire Canyon Site in detail and showed which areas of the canyon were of concern.

d. Total Maximum Daily Load (TMDL)

The Silver Creek TMDL for cadmium and zinc was approved by EPA on August 4, 2004. The endpoints are the existing hardness-based water quality standards (cadmium 0.3 ug/l, zinc 390 ug/l), based on a hardness value of 400 mg/l. The estimated percent reduction in metals loading by location ranges from 19% to 84%.

e. Investigative Activities Specific to the Daly West Mine Dump

In light of the recent development proposal by DVLR, more investigative activities have been conducted at the Daly West Mine Dump area. These include the documents listed in Appendix D.

f. Engineering Evaluation / Cost Analysis

Based upon the PA, ESI, and watershed investigations, EPA determined that a Non-Time Critical Removal Action was necessary for Empire Canyon, primarily to address impacts to surface water. An Engineering Evaluation/Cost Analysis (EE/CA) Approval Memorandum was signed in early 2002, documenting that the use of removal authority was appropriate for Empire Canyon. On May 14, 2002, United Park City Mines voluntarily entered into an Administrative Order on Consent for Removal Action, Docket No. CERCLA-08-2002-05 (EE/CA AOC) with EPA to conduct an EE/CA for the Site. The EE/CA was completed on June 10, 2003. Following approval of the November 6, 2003 Empire Canyon Action Memorandum, EPA entered into the previously mentioned AOC with UPCM for the NTCRA, which began in the spring of 2004.

2. Site Characteristics

A detailed description of the Site characteristics is presented in the EE/CA and the aforementioned reports listed in sections 1.d and 1.e, above.

3. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

As stated previously, several historic mining operations existed in the Empire Canyon drainage. Waste rock and tailings from these operations were deposited at various locations in the canyon, including the Daly West Mine Dump. Sampling has shown the waste rock and tailings contain elevated levels of several heavy metals, including lead, arsenic, zinc, and cadmium. Sampling of surface waters, sediments, and soils in and below Empire Canyon has shown that heavy metals have been released from mine waste to surface water, ground water, and soils.

4. National Priority List (NPL) Status

Empire Canyon is not listed on the NPL. EPA currently does not anticipate listing the Site on the NPL.

B. Other Actions to Date

1. Previous Actions

- a. Previous Actions Associated with Empire Canyon

The actions described below pertain primarily to actions carried out by UPCM or by Park City Municipal Corporation (PCMC). While these actions may not have taken place within the Site boundary, they are closely related to the Site and had an overall effect on the Upper Silver Creek Watershed.

- Flagstaff Exclusion area.

UPCM has developed and will continue to develop several parcels of land in and near Empire Canyon, herein referred to as the Flagstaff Development. The Flagstaff Development includes several residential properties. To determine if there were any mining impacts in this area, UPCM, in conjunction with EPA, UDEQ, and the USCWSG, conducted detailed sampling of the Flagstaff Development. This sampling showed that mine waste and heavy metals were present in very limited areas within the development area, but that most areas were free from impacts. Further, investigations showed that this area had little or no impact to surface water in Empire Canyon. UPCM prepared detailed sampling reports for UDEQ and EPA, and, based upon this information, EPA specifically excluded this area from the boundaries of the Empire Canyon Site and issued UPCM comfort letters for the development area. The EE/CA, AOCs, and Empire Canyon Action Memorandum specifically exclude this area from the Empire Canyon Site. Any environmental issues present in this area were, or are, being handled voluntarily by UPCM in conjunction with the USCWSG.

- Judge Tunnel.

The Judge Tunnel is a drain tunnel which underlies much of Empire Canyon. It is part of an interconnected system of tunnels, shafts, and other underground mine features that are present in the mountains above Park City. Much, if not most, of the water that infiltrates into the ground in Empire Canyon may enter the Judge Tunnel system, where it eventually discharges into the lower reaches of the canyon. The PCMC collects this water and uses it for drinking water. There have been numerous investigations related to Judge Tunnel, evaluating aspects of its use as drinking water.

Based upon these investigations, PCMC has already taken several steps to ensure the safety of the water, and other steps are currently being planned or considered. These steps include construction of a water treatment plant and obtaining a Utah Pollutant Discharge Elimination System (UPDES) permit for any water discharged to Silver Creek. The PCMC is currently working with UPCM on finding a site in Empire Canyon for the proposed treatment plant.

- Previous cleanups by UPCM.

UPCM has voluntarily addressed several areas of mine waste in the Empire Canyon drainage. This work includes reshaping and recontouring of mine dumps, consolidation of some contaminated soils and mine waste into larger mine dumps, and rerouting of surface water. This work was coordinated with EPA and UDEQ.

2. Current Actions at the Empire Canyon Site:

- Remediation of the Stream Channel: UPCM has remediated 4,100 linear feet of stream channel since late 2004. This work involves excavation of contaminated sediments, reshaping the stream channel to allow for ecological success, lining the channel with appropriate material, and revegetating the affected stream channel slopes.
- Remediation of mine dumps: Since late 2004, several mine dumps, including the Alliance, New Quincy, Little Bell, Anchor, and Daly West have been partially or completely remediated. Some portions of the mine dumps could not be remediated due to steep slopes where cover materials would not hold or areas where additional cut or fill were proposed for future remediation. Several recreational trails were covered with clean fill or re-routed away from contaminated soils.
- Conditional Use Permit and Off-Site Determination: EPA issued an Off-Site Determination Memo in September, 2004 to allow for disposal of material from the Empire Canyon Site at the Richardson Flat Tailings Site (RFT Site). The RFT Site is listed in CERCLIS and is also owned by UPCM. A Record of Decision for the RFT Site was signed in July, 2005, and EPA is currently negotiating a Remedial Design/Remedial Action Consent Decree for the work that UPCM will conduct. UPCM was also required to obtain a Conditional Use Permit from the

PCMC in order to transport the waste from the Empire Canyon Site to the RFT Site. During the 2005 construction season, approximately 81,000 cubic yards of soils and mine waste were transported to the RFT Site.

C. State and Local Government Roles

UDEQ has been very involved in the USCWSG and in the investigation of Empire Canyon. UDEQ was the lead agency for the PA and ESL. UDEQ was involved in the oversight of the EE/CA sampling and will also be involved in the performance of the alternative selected in this Action Memorandum through a direct agreement with UPCM. Representatives of Park City and Summit County are members of the USCWSG and were very involved in the investigations and decision making for the Site.

III. THREATS TO PUBLIC HEALTH OR WELFARE, THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions at the Site may present an imminent and substantial endangerment to public health and the environment and meet the criteria for initiating a Removal Action under 40 C.F.R. Section 300.415(b)(2), which is part of the National Contingency Plan (NCP). The following factors from Section 300.415(b)(2) of the NCP form the basis for EPA's determination of the threat presented and the appropriate action to be taken:

- A. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

Heavy metals, particularly zinc and cadmium, migrate from mine waste in Empire Canyon into Silver Creek. These metals are present in both water and sediment at concentrations that may impact both fish and the aquatic food chain and contribute to exceedances of water quality standards in Silver Creek.

- B. Actual or potential contamination of drinking water supplies or sensitive ecosystems.

Flow from Empire Canyon enters Silver Creek, which feeds several wetlands at lower elevations. Wetlands are considered an extremely sensitive and vital ecosystem.

- C. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.

Historic water quality sampling has shown that heavy metals are leached from the mine waste and migrate into flowing surface waters. Prior to extensive removal activities in the canyon, sediments were also impacted and likely contributed to surface water impacts during heavy runoff and storm events.

IV. ENDANGERMENT DETERMINATION

The actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum Amendment, may present an imminent and substantial endangerment to public health or welfare or the environment. Contaminants are verified to be present at levels which present unacceptable risk to the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action

1. Objectives and Scope

The primary objective of the removal action is to significantly reduce heavy metal loading to surface water from sources in Empire Canyon. This load reduction will be achieved through isolation of surface water from mine wastes in Empire Canyon through a variety of mechanisms. The secondary objective of the removal action is to minimize the potential for human exposure to elevated lead and arsenic concentrations in soils within the Site. This objective will be achieved through consolidating and covering select areas of mine waste and through surface reclamation.

2. Primary proposed action

Mine waste in areas identified as adversely impacting surface water are being excavated. The channels are being reconstructed using clean rip-rap material and/or culverts. Some segments of the channels may also be lined with a clay liner to keep water on the surface. Several recreational trails in contact with contaminated soils or mine waste may be covered, and some areas of trails may also be rerouted. The Daly West Mine Dump was originally to be re-contoured and covered with clean material. In certain areas, surface water flow in the vicinity of the Daly West Mine Dump was to be re-routed to minimize contact with waste rock. A cut-off ditch was to be constructed on the up-gradient side of the dump. Surface water from the Empire, Daly Draw and Walker Webster channels was to be directed into an underground culvert and isolated from waste rock. During the past two construction seasons much of the above identified remediation work has been completed.

The Daly West Mine Dump is to be - to DV Luxury Resorts for the construction of a hotel, spa and condominium project on the Site. The re-development of the Site changes the anticipated use from recreational to residential and commercial. The hotel condominium and associated infrastructure are not considered to be part of the remedy but will be constructed in a manner compatible with the final remedy selected in the Empire Canyon EE/CA. Upon completion of excavation, fill and final grading activities, all exposed areas of mine rock will be covered with low-permeability clay rich cover soil and will be revegetated. A storm water system will be constructed to divert and treat surface water and stormwater runoff from the Site. Excavated soil generated during construction will be transported and consolidated to Anchor Mine and/or Richardson Flat Superfund Site. If waste is moved off-site for disposal, actions will comply with the Off-Site Determination.

Approximately 7,100 linear feet of channel will be remediated in Empire Canyon. To date 4,100 feet of channel remediation has been completed. Approximately 2,800 feet of the stream channel in Walker Webster has been remediated to date. Approximately 2,500 feet of recreational trail may be remediated throughout Empire Canyon. In addition, remedial activities have been conducted in areas containing significant amounts of impacted waste rock (e.g., Alliance Mine Dump and Daly West). These areas were regraded, to the extent practical and capped with clean material. The Site will be monitored for five years to ensure that the remediation is effective in improving the environmental quality of the Site. Institutional controls will be implemented as required by the National Contingency Plan for the protection of Site workers, recreational users, and hotel users. .

For more information about sampling of contaminants and potential exposures, see Appendix C.

As required in the EE/CA and AOC, and as will be required in the Prospective Lessee Agreement between EPA and DV Luxury Resorts, a Work Plan will set forth long-term management plans and responsibilities for Empire Canyon once the removal action is complete.

3. Contingency Actions

There are no contingency actions identified for the Site.

4. Funding Limitations

There are no known funding limitations restricting response actions for the Site. However, response actions may be phased over multiple construction seasons.

5. EE/CA.

An EE/CA was prepared by UPCM for the original removal action. A public comment period on the recommended alternative was held from July 23, 2003 to August 21, 2003. A public meeting was held on August 19, 2003. Park City Municipal Corporation offered several comments and concerns which have been addressed or will be addressed during development of the removal work plan. No other adverse comments were received. The preferred alternative of the EE/CA is the response action recommended in EPA's November 3, 2003 Action Memorandum. The EE/CA is part of the Administrative Record for the Site.

6. ARARs

This Removal Action will attain, to the extent practicable, Federal and/or State ARARs whichever is more stringent. A list of ARARs is included in Appendix A. The change in land use effected by this Amendment does not affect the ARARs set forth in the 2003 original action memorandum. All references in the ARARs to UPCM will also apply to DV Luxury Resort LLC. for the Amendment activities.

7. Project Schedule.

Some preliminary work has already been completed. Work specified in the initial Action Memorandum began in the spring of 2004, and was contingent upon execution of an AOC, and was expected to last approximately two construction seasons. The hotel construction and associated work is expected to begin during the summer of 2006, and is expected to last approximately three construction seasons.

B. Estimated Costs

The response action for removal and capping is estimated to cost approximately \$1,200,000.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If no Removal Action is taken or if the action is delayed, loading of heavy metals during spring runoff will continue. It is important to address Empire Canyon immediately, as it forms the headwaters of Silver Creek. Cleanups in lower portions of the watershed cannot commence until contamination in upper portions, such as Empire Canyon, is addressed and the potential for recontamination is removed. It is likely that water quality standards in Silver Creek will not be attained through remediation of Empire Canyon alone, but it is also likely that water quality standards cannot be attained consistently unless and until Empire Canyon is remediated.

VII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues regarding this Removal Action.

VIII. ENFORCEMENT

An enforcement confidential summary is included as Appendix B.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Empire Canyon Site, Park City, Utah and was developed in accordance with CERCLA, as amended, and is consistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed PRP-lead removal action, with the amendments relating to the construction of a hotel at the Site.

Approve: Max H. Dodson Date: 9/7/06
Max H. Dodson
Assistant Regional Administrator
Office of Ecosystems Protection and Remediation

Disapprove: _____ Date: _____

Max H. Dodson

Assistant Regional Administrator

Office of Ecosystems Protection and Remediation

Attachments:

Appendix A: ARARs

Appendix B: Enforcement Addendum

Appendix C: Toxicologist's Comments on Montage Hotel Development at Daly West Dump Site

Appendix D: Documents Incorporated by Reference

Appendix A
Applicable or Relevant and Appropriate Requirements (ARARs)
Empire Canyon Site Non-Time Critical Removal Action

Requirement	Citation	Description/Prerequisite Determination	Comment	
Chemical Specific ARARs				
Definitions and General Requirements of Utah Water Quality Regulations	UAC R317-1	Provides definitions and general requirements for waste discharges to waters of the State of Utah.	Relevant and Appropriate	No known point source discharges at Site, but may be applicable to discrete stormwater point source discharges to jurisdictional waters. Flow is ephemeral and present only for a few months per year.
Utah Surface Water Quality Standards	UAC R317-2-6 UAC R317-2-13 UAC R317-2-14	Establishes use designations for Silver Creek and headwaters (as tributary to Weber River).	Relevant and Appropriate	No known point source discharges at Site, but may be applicable to discrete stormwater point source discharges to jurisdictional waters. Flow is ephemeral and present only for a few months per year.
National Ambient Air Quality Standards	40 CFR Part 50	Establishes ambient air quality standards for certain criteria pollutants to protect public health and welfare.	Relevant and Appropriate	Emissions associated with proposed removal action will not constitute a major source. Attainment and maintenance of NAAQS pursuant to new source review are not applicable. However, standards relating to lead are relevant and appropriate.
Resource Conservation and Recovery Act (RCRA) Subtitle C	40 CFR Part 264	Provides regulation of hazardous waste.	Relevant and Appropriate	Although Subtitle C is not generally applicable to mining related wastes, may be relevant and appropriate if excavated soils are disposed of off-site and fail EPA's Toxicity Characteristic Leachability Procedure.

Appendix A
Applicable or Relevant and Appropriate Requirements (ARARs)
Empire Canyon Site Non-Time Critical Removal Action

Requirement	Citation	Description/Prerequisite	Determination	Comment
Action Specific ARARs				
Air Emissions; Fugitive Emissions and Fugitive Dust	UAC R307-205-2 UAC R307-205-3 UAC R307-205-5 UAC R307-205-6	Construction and demolition activities, roads and aggregate materials must be managed to minimize fugitive dust. Applies to all activities that generate fugitive dust.	Applicable	UPCM and DVLR will implement best management practices to address dust control at the Site.
Utah Storm Water Rules	UAC R317-8-3.9	Establishes state storm water requirements.	Applicable	UPCM and DVLR will implement best management practices to address storm water management at Site.
General Earthwork & Construction	UAC R315-8-2.10	Establishes requirements for a construction QA program to ensure that constructed units meet or exceed design criteria.	Relevant and Appropriate for repositories including Bevill exempt waste	UPCM and DVLR will implement the construction QA program during the removal action.
General Earthwork & Construction	UAC R307-102-1	Emission of air contamination in sufficient quantities is prohibited.	Applicable	

Appendix A
Applicable or Relevant and Appropriate Requirements (ARARs)
Empire Canyon Site Non-Time Critical Removal Action

Requirement	Citation	Description/Prerequisite	Determination	Comment
Remediation and Repository Closure	UAC R311-211-6	Provides cleanup standards evaluation criteria for corrective actions at CERCLA sites within Utah.	Relevant and appropriate	Will be used for removal and disposal of CERCLA hazardous substances in receiving facilities
Solid Waste Treatment and Disposal	UAC R315-301-6	Applies to solid waste disposal.	Relevant and appropriate	Appropriate for on-site repositories
Solid Waste Facility Location Standards	UAC R315-302	Applies to disposal of solid waste in landfills, land treatment disposal sites, and piles.	Applicable	Applies to on-site repositories
Off-Site Management of CERCLA Wastes (Off-Site Rule)	40 CFR §300/440	Applies to any CERCLA action involving off-site transfer of any hazardous substance or pollutant and contaminant. EPA Regional Office will determine suitability of off-site facility.	Applicable	Applicable only if material is moved off-site.

Appendix A

Applicable or Relevant and Appropriate Requirements (ARARs)

Empire Canyon Site Non-Time Critical Removal Action

Requirement	Citation	Description/Prerequisite	Determination	Comment
Location Specific ARARs				
Protection of Wetlands	33 USC §1344 and 40 CFR Part 230 and Executive Order 11990	Prohibits discharge of dredged or fill materials into waters of the U.S.	Applicable	Potentially applicable depending on work. Measures will be developed to avoid, restore, or mitigate impacts to wetlands, if any.
Historic Sites, Building, and Antiquities Act	16 USC §§461-467	Requires protection of landmarks list on National Registry.	Applicable	No expected impacts.
National Historic Preservation Act	16 USC §470	Requires protection of district, site, building, structure, or object eligible for inclusion of national register of historic places.	Applicable	No expected impacts.
Archeological and Historic Preservation Act	16 USC §469	Requires preservation of significant historical and archeological data.	Applicable	No expected impacts.
Fish and Wildlife Coordination Act	16 USC §661 et seq	Requires that actions taken in areas that may affect streams and rivers be undertaken in a manner that protects fish and wildlife.	Applicable	EPA has discussed with USFWS and expects no negative impacts; actions will improve Silver Creek; no fish habitat in Empire Canyon;
Endangered Species Act	16 USC §1531	Requires protection of endangered and threatened species.	Applicable	EPA has discussed with USFWS and expects no negative impacts

Appendix A
Applicable or Relevant and Appropriate Requirements (ARARs)
Empire Canyon Site Non-Time Critical Removal Action

Requirement	Citation	Description/Prerequisite	Determination	Comment
Migratory Bird Treaty Act	16 USC §703 et seq	Requires protection of migratory non-game birds.	Applicable	EPA has discussed with USFWS and expects no negative impacts
Floodplain Management	Executive Order No. 11988	Pertains to floodplain management and construction requirements in such areas.	Applicable	Applicable to soil removed or repositories located within floodplain.
Resource Conservation and Recovery Act (RCRA) Subtitle D	40 CFR Part 257	Facilities where treatment, storage, or disposal of solid waste will be conducted considering certain location standards which include restrictions on proximity to airports, floodplains, wetlands, fault areas, scenic impact zones, and unstable areas.	Applicable	Any on-site repository or to any existing off-site facility that receives CERCLA hazardous substances.

APPENDIX B – Enforcement Addendum

Exemption 5

Exemption 5

Exemption 5

APPENDIX C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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6 April 2006

MEMORANDUM

SUBJECT: Comments on Montage Hotel Development on Daly West Mine Site

FROM: Susan Griffin, PhD, DABT
Senior Toxicologist
Program Support Group

TO: Peggy Churchill
Remedial Project Manager
Empire Canyon/ Daly West Site

At your request I have looked at some of the inorganic sampling data from the Daly West Mine Site where the Montage Resort is expected to be built. I've also discussed the construction project (e.g., remediation depths, clean fill, disposal of material) and exposed populations with both Kerry Gee and Jim Fricke who are associated with the Montage Development project.

The Montage Resort is expected to be built on the Daly West Mine Site and will include a hotel, spa, and condominium project. Previous sampling efforts from 1999 showed elevated levels of lead and arsenic in the soils ranging from 619 – 5060 ppm and 18 – 423 ppm, respectively. Some of the areas of the Daly West Mine Site have been remediated since that time, however, the 1999 data is still considered somewhat representative of the surface and subsurface inorganic soil concentrations where the resort is to be built. Potential receptors to the contaminated soils include construction workers building the resort, employees working at the resort, and guests of the resort. It is not always necessary to physically remove contaminated soils to prevent exposure. Any barrier which eliminates or reduces contact with the contaminated materials will mitigate exposure and risk. Once the hotel and condominiums are built, the contaminated soils will either be removed and/or covered with concrete. Landscaping will be placed on 12-18 inches of clean fill and vegetated. These barriers of concrete, clean fill and vegetation (in addition to the snow cover for much of the year) will eliminate or reduce exposures to inorganics in soil to minimal levels which should not pose a health concern to employees or guests of the resort.

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The receptors which would be expected to receive the greatest exposure would be the construction workers building the resort. They would be exposed to elevated levels of lead and arsenic in surface and subsurface soils via ingestion, inhalation, or dermal exposure. By way of comparison, the preliminary remediation goal (site average) calculated for construction workers at the Rose Walsh Smelter site in Durango for lead in soils was 1500 ppm and the remedial action level (not to exceed level) was 2150 ppm. These levels were based on a 1 year period of exposure. The lead levels present at the Daly West Mine site (619-5060 ppm) could pose an unacceptable health risk to construction workers and it would be prudent to monitor these workers exposure carefully during the construction period. The arsenic levels present at the Daly West Mine site do not present as a significant concern, however, it would be wise to include arsenic monitoring as part of the health and safety plan.

APPENDIX D

United Park City Mines Company

Document List relative to Daly West Mine Site.

Document Name	Author	Date
Sampling and Alanylsis Plan for Empire Canyon	RMC for UPCMC	7/7/2002
Results of Groundwater Study for the Proposed Montage Resort and Spa, Deer Valley, Utah.	Golder Associates for the Athens Group	25-Oct-05
Flagstaff Mountain Resort, Report of Sampling Activities Within the Area Proposed for Development	RMC for UPCMC	Jan-02
Engineering Evaluatino/Cost Analysis for Empire Canyon	RMC for UPCMC	8-Jul-03
Expanded Site Inspection - Analytical Results Report for Empire Canyon UT0002005981	Alan V. Jones for UDEQ/DERR	Mar-03
Data Valuation Summaries and CLP Data Sheets for Ekxpanded Site Inspection Analytical Results Report Empire Canyon Summit County, Utah UT0002005981	Alan V. Jones for UDEQ/DERR	Apr-02
Attachment A Tracer Study Results Report for Expanded Site Inspection Analytical Results Report Empire Canyon Summit County, Utah UT0002005981	Ann Tillia for UDEQ/DERR	Mar-03
Phase I Environmental Site Assessment Flagstaff Pods A, B2 and D Flagstaff Mountain	RMC for UPCMC	5-Jun-02
Report of Sampling Activities within Flagstaff Pos A, B2 and D Flagstaff Mountain	RMC for UPCMC	Jun-02
Flagstaff Mouuntain Resort Work Plan for Remediation of Mine Wastes located in Pods A, B2 and D	RMC for UPCMC	7-Jun-02
Removal Action Work Plan for Empire Canyon	RMC for UPCMC	15-Mar-04
Empire Canyon Quarterly Status Report for April through June 2004	RMC for UPCMC	1-Jul-04
Empire Canyon Quarterly Status Report for July through September 2004	RMC for UPCMC	1-Oct-04
Empire Canyon Quarterly Status Report for October through December 2004	RMC for UPCMC	22-Mar-05
Empire Canyon Quarterly Status Report for April through June 2005	RMC for UPCMC	6-Jul-05
Empire Canyon Quarterly Status Report for July through October 2005	RMC for UPCMC	10-Oct-05